# UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION RENTON, WASHINGTON 98055-4056

In the matter of the petition of

#### **Atlantic Coast Airlines**

for an exemption from §§ 25.562(c)(5) and 25.785(a) of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2000-8500

#### **GRANT OF EXEMPTION**

By letter dated December 18, 2000, Mr. Robert P. Silverberg, Attorney, Silverberg Goldman & Bikoff, L.L.P., Georgetown Place, Suite 120, 1101 30th Street NW, Washington, D.C., 20007, representing Atlantic Coast Airlines (ACA), petitioned the Federal Aviation Administration (FAA) for an exemption from §§ 25.785(a) and 25.562(c)(5) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would extend the compliance date of Exemption No. 6776 regarding the Head Injury Criterion (HIC) for front row passenger seating in one Jetstream Series 4100 airplane to allow retrofit of that airplane in accordance with the previously issued exemption.

### The petitioner requests relief from the following regulations:

**Section 25.785(a)** requires that each seat, berth, safety belt, harness, and adjacent part of the airplane at each station designated as occupiable during takeoff and landing must be designed so that a person making proper use of those facilities will not suffer serious injury in an emergency landing as a result of inertia forces specified in §§ 25.561 and 25.562.

**Section 25.562(c)(5)** requires that each occupant must be protected from serious head injury under the conditions prescribed in paragraph (b) of this section. Where head contact with seats or other structure can occur, protection must be provided so that the head impact does not exceed a Head Impact Criterion (HIC) of 1,000 units.

# The petitioner's supportive information is as follows:

"Atlantic Coast Airlines (ACA) hereby petitions for an amendment to Exemption No. 6776 (the Exemption) to extend its effectiveness until March 31, 2001. The short extension of the Exemption will conform its term to the term of newly issued Exemption No. 5587G. Both the Exemption and Exemption No. 5587G granted relief from sections 25.785(a) and 25.562(c)(5) of the Federal Aviation Regulations--the so-called Head Impact Criterion (HIC) rule. Exemption No. 5587G applies to all Jetstream Series 4100 aircraft (J-41) delivered by the manufacturer (BAE Systems Regional Aircraft (BEA)) prior to September 30, 1997. Thirty-one out of thirty-two of ACA's J-41 aircraft are covered by Exemption No. 5587G. Exemption No. 6776 applies to a single J-41 aircraft (Serial No. 41101) operated by ACA that is not covered by Exemption No. 5587G because it was delivered to ACA after September 30, 1997.

"ACA, as one of only two U.S. commercial operators of the J-41 aircraft, has closely followed the certification effort being undertaken by the manufacturer that would allow for compliance with HIC. This involves the certification of the Amsafe Aircraft Inflatable Restraint (AAIR) system. In ACA's judgment, the AAIR system is the preferred solution from a passenger convenience standpoint and one that will offer superior passenger protection. This certification effort was to have been completed by September 2000, but, because of an unforeseen certification test failure in July, the manufacturer and its contractor have had to revise the certification time line past the December 31, 2000, deadline thereby placing ACA in a position where it cannot comply with the HIC rule by the end of the year.

"Recognizing that the certification target date was slipping, BAE in August 2000, sought to extend the effectiveness of Exemption No. 5587F to March 31, 2001. By Exemption No. 5587G, dated November 21, 2000, the FAA granted the BAE request. In doing so, the FAA found that "[i]n light of the progress of the inflatable lapbelt airbag system, and its long term potential to provide enhanced occupant" protection, the FAA considers that a short extension of the compliance time would be in the public interest, and would not compromise safety." (Exemption No. 5587G, page 4).

"Unfortunately, and as noted above, one of ACA's J-41 aircraft is not covered by the extended Exemption No. 5587G because of the timing of the delivery of the aircraft to ACA. Therefore, and for the same public interest reasons set forth by BAE in its August 2000, petition, ACA seeks a similarly limited extension of the application of HIC rules to J-41 aircraft Serial No. 41101.

"In this regard, though recent meetings with the FAA, ACA understands that the FAA is not inclined to grant any further relief to BAE in connection with the development and certification of a mechanical means to cause the J-41 to comply with HIC. However, it has been accepted by the FAA that the inflatable lapbelt airbag is a viable option and will, in fact, provide superior

occupant protection. Rather than require operators of the J-41 to adopt a suboptimal solution to meet the requirements of HIC, the FAA has correctly held that a further short extension will not compromise safety. This same reasoning should apply to the single ACA aircraft not covered by Exemption No. 5587G.

"In considering this petition, ACA requests that the FAA waive publication of this request in the Federal Register, for the following reasons. (See FAR section 11.87). First, grant of this request will not set a precedent. Rather, this exemption request mirrors the one filed by BAE and subsequently approved by the FAA on November 21, 2000. When BAE filed its petition in August 2000, it did not recognize that one of ACA's J-41 aircraft was not covered by the its request. This ACA petition for renewal will simply permit ACA to treat aircraft Serial No. 41101 as it treats all of its other J-41 aircraft with respect to compliance with HIC.

"Second, the relief requested by ACA is identical, to the relief granted BAE in Exemption No. 5587G. Therefore, no substantial additional analysis and coordination is required to consider the merits of the ACA request. Further, delay in acting on this request were it to be published in the Federal Register would adversely affect ACA by precluding it for having occupants sit in the three bulkhead sits on aircraft no. 41101 until such time as compliance with HIC is achieved. This would reduce the revenue payload of the aircraft and cause ACA, at some considerable expense in terms of loss of aircraft scheduling efficiency, to try to isolate the aircraft from the remainder of its J-41 fleet. Since the FAA has determined in Exemption No. 5587G that safety will not be compromised by a short extension until March 31, 2001, for all of ACA's other J-41 aircraft it would be unfair not to grant the same relief to aircraft Serial No. 41101 based on the reasoning and logic that the FAA accepted in Exemption No. 5587G and thereby avoid incurring these additional costs. Finally, ACA is filing this request on a timely basis once it determined on December 6, 2000, when in consultation with BAE, that BAE's requested extension of relief from the HIC rule did not include ACA J-41 aircraft. Accordingly, the FAA should not publish this petition for exemption in the Federal Register.

"Because ACA only just became aware that BAE did not apply to extend the HIC exemption for aircraft Serial No. 41101, ACA also requests a waiver from FAR section 11.63 requiring petitions be filed 120 days or more prior to their effective date."

The FAA finds, for good cause, that action on this petition should not be delayed by publication and comment procedures for the following reasons: (1) a grant of exemption would not set a precedent in that it establishes a retrofit time for compliance with a requirement and not permanent relief from the requirement; and (2) a delay in acting on the petition would be disruptive to the flying public and create a major economic burden on the manufacturer and operators.

## The FAA's analysis/summary is as follows:

In previously granting temporary exemptions to British Aerospace to allow delivery and retrofit of the Jetstream Series 4100 airplanes, it was the FAA's intent to minimize the number of airplanes with delayed compliance, while at the same time fostering the development of suitable design solutions. For this reason, the FAA established a termination on further deliveries of airplanes that did not fully comply with § 25.562(c)(5), in Exemption No. 5587E. In so doing, it was the FAA's intent that the size of the non-complying fleet would be limited, although it was recognized that a small number of already manufactured airplanes could be delivered between the time the exemption was issued and the deadline imposed by the exemption, on the condition that these airplanes be brought into compliance no later than December 31, 2000.

As noted in Exemption No. 6776, the airplane under consideration in this petition is, in fact, one such airplane. Exemption No. 6776 was granted to permit airplane Serial No. 41101 to be treated equally with those airplanes covered by Exemption No. 5587, since that airplane was effectively part of the same group. Since the FAA has recently issued Exemption No. 5587G to extend the compliance date until March 31, 2001, it would be inconsistent to treat airplane Serial No. 41101 differently.

This exemption allows what the FAA believes is adequate time to accomplish a fleet-wide retrofit. Since the FAA has not specified a progressive schedule for the retrofit (that is, all airplanes must be in compliance after the expiration date, but no airplane is required to comply before that), imposing a different date here would serve no purpose. In practice, the operator will have to adjust the modification schedule to accommodate an additional airplane, which will have the effect of imposing a shorter compliance date on *some* airplanes.

In consideration of the foregoing, I find that a grant of exemption is in the public interest, and will not significantly affect the overall level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, the petition of Atlantic Coast Airlines regarding the HIC requirements of §§ 25.562(c)(5) and 25.785(a) of 14 CFR, for front row passenger seats on Jetstream Series 4100 Model 4101, Serial No. 41101, is granted until March 31, 2001.

Issued in Renton, Washington, on December 22, 2000.

/s/ Dorenda D. Baker Dorenda D. Baker Acting Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-100